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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/415,392	10/08/1999	DMITRY A. RAYKHMAN	D21-001	4774

7590 06/20/2002

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EXAMINER

MCCLELLAN, JAMES S

ART UNIT	PAPER NUMBER
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3627

DATE MAILED: 06/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/415,392

Applicant(s)

RAYKHMAN, DMITRY A. 

Examiner

James S McClellan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 October 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) 26-54 and 67-73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 55-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-25 and 55-66, drawn to a method for trading a commodity, classified in class 705, subclass 37.
  - II. Claims 26-47, drawn to a general purpose digital computer, classified in class 700, subclass 90.
  - III. Claims 48-54 and 67-73, drawn to a server computer, classified in class 709, subclass 200.
2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the computer (Group II) can be used in a materially different process. The general purpose computer of Group II, can be used for activities other than trading a commodity. For example, the general purpose computer could create a spreadsheet or view digital pictures.
3. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP

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§ 806.05(h)). In the instant case the server (Group III) can be used in a materially different process. The server computer of Group III, can be used for activities other than trading a commodity. For example, the server could connect users to the Internet for conducting research on the World Wide Web.

4. Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I (general purpose computer) has separate utility such as it may be used without a server. See MPEP § 806.05(d).

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group III, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group III, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Neil Sudol on 5/28/02 a provisional election was made with traverse to prosecute the invention of Group I (a method of trading a commodity), claims 1-25 and 55-66. Affirmation of this election must be made by applicant in replying to this

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Office action. Claims 26-54, and 67-63 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Information Disclosure Statement***

7. Applicant's submission of an IDS on March 26, 2001 is acknowledged and fully considered. A signed copy of the PTO-1449 form is attached to this Office Action.

***Drawings***

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **274** (stop computation circuit; see specification page 42, line 1). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

9. The disclosure is objected to because of the following informalities:

on page 21, line 9, “,” should be replaced with --.-- and

on page 26, line 17, “**1,99.97**” should be replaced with --**1,499.97**--.

Appropriate correction is required.

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***Claim Objections***

10. Claims 1 and 63 are objected to because of the following informalities:
- in claim 1, line 10, "to" should be deleted and
- in claim 63, line 2, "to" should be deleted in order to overcome grammatical problems.
- Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
12. Claim 56 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 56 recites the limitation "**the trading order**" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim. The Examiner recommends replacing "**the trading order**" with **--the trading offer--** in order to overcome the lack of antecedent basis.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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14. Claims 1, 4-20, 22-25, 55, 56, 58, and 61-66 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,980,826 (Wagner).

In regards to independent **claim 1**, Wagner discloses a method for trading a commodity comprising: receiving, in encoded form via a computer network, a plurality of bids and a plurality of offers pertaining to a common commodity (see Figure 23 which shows a list of buys and a list of sells); displaying said bids and offers on a computer monitor (see Figure 23); generating a trading offer including a trading rate or price per unit of said commodity (see Figure 23, PRICE), and a number of units of said commodity (see Figure 23, QTY is quantity); automatically calculating a total stop amount (see column 4, lines 33-36, "stop orders") for said trading offer; automatically comparing said total stop amount with an available amount in a client or trader account (see column 20, lines 57-58 and block 72 of Figure 2 which includes "accounting" functions); transmitting a digital signal encoding said trading over said computer network for distribution to multiple traders (see column 7, lines 41-44); [**claim 4**] automatically allocating or reserving said total stop amount from the available amount in said client or trader account (via clearing system 38 as shown in block 72 of Figure 2); [**claim 5**] canceling at least a portion of said trading offer and automatically returning at least a portion of the allocated or reserved amount to said client or trader account upon such cancellation (via button 682 and in column 13, lines 29-31); [**claim 6**] said digital signal is transmitted upon and only upon a determination that said total stop amount is less than the available amount in said client or trader account (via clearing system 38 as shown in block 72 of Figure 2); [**claim 7**] the generating of said trading offer and the comparing of said total stop amount with the available amount in said client or trader account are performed by a client or trader computer ("smart" remote terminals

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18 and 20) connected to said computer network; **[claim 8]** the transmitting of said digital signal includes directing said digital signal to a server computer (central processor 13 of trading system 12) connected to said computer network, said server computer distributing said trading offer to said traders; **[claim 9]** the calculating of said total stop amount includes automatically multiplying a default stop per unit (inherent feature of system since the trading offer is calculated via a price and quantity) times the identified number of units (quantity) of said commodity in said trading offer; **[claim 10]** said trading offer additionally includes identification of a stop amount per unit of said commodity, the calculating of said stop amount includes automatically multiplying said stop amount per unit (inherent feature) of said commodity times the identified number of units (quantity) of said commodity in said trading offer; **[claim 11]** displaying on said monitor (see Figure 23) a prompt for entry of a stop value (inherent feature when implementing a system for conditional orders, see paragraph bridging columns 15 and 160; notice prompt for data entry in Figure 23); determining that a respective stop value has been selected for said trading offer, forwarding, via said computer network, said respective stop value to a server computer (13) together with said trading offer; **[claim 12]** displaying on said monitor (see Figure 23) a prompt for entry of a limit value (inherent feature when implementing a system for conditional orders, see paragraph bridging columns 15 and 160; notice prompt for data entry in Figure 23); determining that a respective limit value has been selected for said trading offer, forwarding, via said computer network, said respective limit value to a server computer (13) together with said trading offer; **[claim 13]** displaying on said monitor a prompt for entry of a limit value (inherent feature when implementing a system for conditional orders, see paragraph bridging columns 15 and 160; notice prompt for data entry in Figure 23) for which said trading



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offer remains valid and capable of being accepted; determining that a respective time period has been selected for said trading offer; determining when said time period is terminated (inherent by definition of a "time order"); canceling said trading offer upon termination of said time period (inherent by definition of a "time order"); **[claim 14]** displaying said bids in a first monotonic sequence on a computer monitor (see Figure 23, notice both buy and sell columns); simultaneously displaying said offers in a second monotonic sequence on said computer monitor (see Figure 23, notice both buy and sell columns); and **[claim 15]** displaying, on said computer monitor (see Figure 23), total units of said commodity for trading at prices identified in said bids and said offers.

In order not to burden the Office Action with redundancy, limitations detailed above will not be repeated in the detailed analysis of the remaining claims.

In regards to independent **claim 16**, Wagner discloses a method of trading a commodity as detailed above and additionally comprising: monitoring a computer input device (for example, keyboard 106, see Figure 3); upon detecting a signal from said input device of a predetermined type, transmitting an order signal over said computer network; **[claim 17]** displaying on said monitor (see Figure 23) a plurality of prompts for particulars of a trading offer, said prompts including prompts to enter a price per unit (PRICE of Figure 23) of said commodity, and total number of units (QTY of Figure 23) of said commodity; **[claim 18]** see detailed analysis set forth above for claim 11; **[claim 19]** see detailed analysis set forth above for claim 12; and **[claim 20]** see detailed analysis set forth above for claim 13.

In regards to independent **claim 22**, Wagner discloses a method for use in trading a commodity (limitations of claim 22 are redundant to features detailed above), **[claim 23]** see

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detailed analysis set forth above for claim 11; **[claim 24]** see detailed analysis set forth above for claim 12; and **[claim 25]** see detailed analysis set forth above for claim 13.

In regards to independent **claim 55**, Wagner discloses a commodity trading method comprising: operating said server computer (13) to maintain (i) a first queue of bids ordered by price per commodity and time of extending of the respective bids (see block 176 of Figure 6) and (ii) a second queue of offers to sell ordered by price per commodity unit and times of extending of the respective offers to sell (see block 172 of Figure 6); operating said server computer (see Figure 6) to determine whether said trading offer matches any entry in said first queue (176) and said second queue (172); upon detection by said server computer (13) of a match between said trading offer and a particular entry in said one of said first and second queue (176, 172), operating said server computer to (a) modify accounts of traders (via clearing system 38 as shown in block 72 of Figure 2) who made said trading offer and said particular entry, (b) remove said particular entry from said one of said first queue and said second queue (see column 15, lines 40-48), (c) transmit signals over said computer network to advise all logged-in traders of the match (see column 15, lines 28-31), (d) sending specific confirmation to the traders who made said trading offer and said particular entry (see column 15, lines 17-21); and **[claim 56]** said trading offer is placed in a respective one of said first queue (see Figure 23) and said second queue (see Figure 23) upon receiving of said trading offer at said server computer (13), the operating of said server computer (13) to determine whether said trading offer matches (see column 15, lines 1-5) any entry in said first queue and said second queue including comparing said bids to said offers to sell to determine whether a match has occurred, said server (13) being operated, upon detection by said server computer (13) of the match between said trading offer

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and said particular entry, to remove said trading offer and said particular entry from respective ones of said first queue and said second queue (see column 15, lines 40-48).

In regards to independent **claim 58**, Wagner discloses a method for use in trading a commodity, comprising: acting on said trading offer only upon determining that said total stop amount and said available amount meet a predetermined criteria (via clearing system 38 at block 72 as shown in Figure 2); **[claim 61]** see detailed analysis set forth above for claim 4; **[claim 62]** see detailed analysis set forth above for claim 5; **[claim 63]** see detailed analysis set forth above for claim 1; **[claim 64]** see detailed analysis set forth above for claim 6; **[claim 65]** see detailed analysis set forth above for claim 7; and **[claim 66]** see detailed analysis set forth above for claim 8.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2, 3, 59, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner in view of Equis International AAI Computerized Investing Newsletter May/June 1998 (hereinafter Equis).

Wagner discloses all the claimed steps as set forth above except for the step of including a slippage amount in the trading offer.

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Equis teaches the use of a trading system that allows the system to account for slippage (see page 4, lines 20-24).

In regard to claims 3 and 60, it would have been obvious to calculate slippage by automatically multiplying a default slip per unit (price) of said commodity times the identified number of units (quantity) of said commodity in said trading offer since that is how Wagner calculates a trading offer, price times quantity.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wagner with the step of accounting for slippage as taught by Equis, because accounting for a slippage amount in a trading system "add[s] realism to a trading system" (see Equis, page 7, line 20).

17. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner in view of U.S. Patent No. 5,845,265 (Woolston).

Wagner discloses all of the claimed steps as set forth above except for the step of downloading from said computer network a program enabling and controlling the displaying of said bids and said offers on said computer monitor in response to said digital signal.

Woolston teaches the use of downloading a software from a global network (Internet, see column 4, line 64) for commercial use by a user (see column 3, lines 7-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wagner with step of downloading software from a global network as taught by Woolston, because downloading software is generally quicker and cheaper than buying software via mail or retail. Downloading software does not require expensive packaging and it does not require shipping delays.

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18. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner in view of U.S. Patent No. 5,924,082 (Silverman et al.).

Wagner discloses all of the claimed steps as set forth above except for the steps of operating said server computer to: supervise the establishment of multiple private chat forums; and distribute message among logged-in traders according to established chat forums.

Silverman et al. discloses the steps of operating said server computer to: supervise the establishment of multiple private chat forums (via box 410, see Figure 4A); and distribute message among logged-in traders according to established chat forums.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wagner with the dialog box of Silverman et al., because the dialog box allows the traders to negotiate a trade without a complete commitment to the trade. This feature allows the traders to "test the water" before commitment to a trade, wherein providing a desirable feature to improve trading.

### *Conclusion*

19. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Hawkins is cited of interest for showing a method and apparatus for trading securities electronically.

Broka et al. is cited of interest for showing an online transaction processing system for bond trading.

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Hawkins et al. is cited of interest for showing a method and system for confirmation and settlement for financial transactions matching.

Keiser et al. is cited of interest for showing a computer-implemented securities trading system with a virtual specialist function.

Kane is cited of interest for showing a securities and commodities trading system.

Braddock, III is cited of interest for showing an automated stock exchange.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jim McClellan whose telephone number is (703) 305-0212. The examiner can normally be reached on Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski, can be reached at (703) 308-5183.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

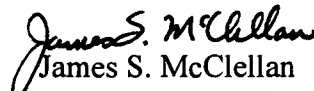
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Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive,  
Arlington, VA, 7<sup>th</sup> floor receptionist.

  
James S. McClellan  
Patent Examiner  
A.U. 3627

jsm; June 14, 2002